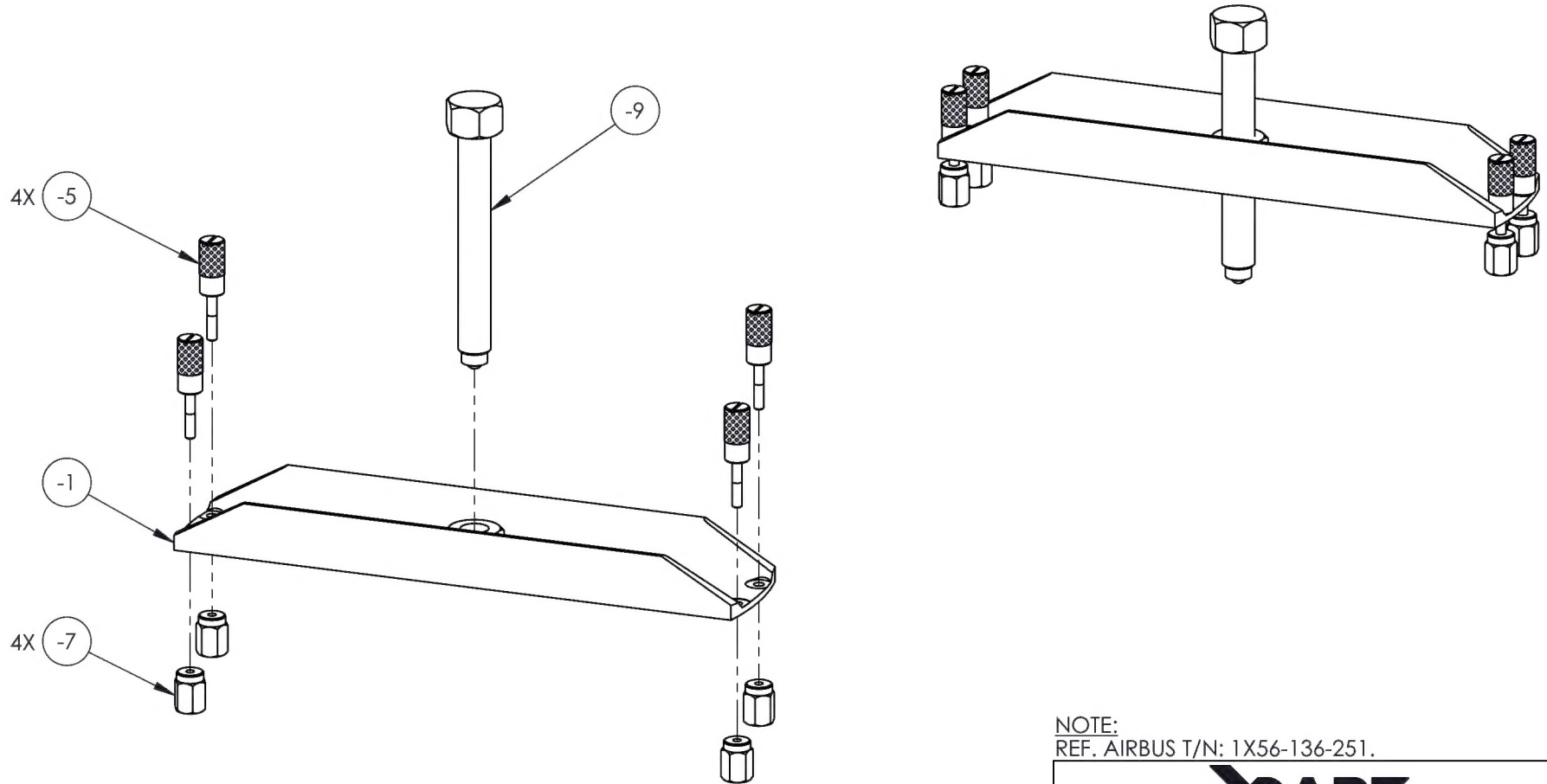


This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

| REVISIONS | | | | | |
|-----------|-----|--------------------------|-----------|---------|----------|
| REV | ECR | DESCRIPTION | DATE | INITIAL | APPROVED |
| 1 | | RELEASED FOR PRODUCTION. | 9/20/2016 | DPD | JAG |



NOTE:
REF. AIRBUS T/N: 1X56-136-251.

| ASSY QTY | ASSY QTY | ASSY QTY | B/O | Part # | UNIT QTY | Description | Material | B/O INFORMATION OR SPECIFICATIONS | PG. | TITLE | | |
|----------|----------|----------|-----|--------|----------|----------------|-----------|--|-------|-------------------------|--|--|
| | | X | | -1 | 1 | FRAME WELDMENT | | | 2 | PULLER | | |
| | | 1 | | -3 | | CHANNEL | STEEL | | 3 | DWG NO. RBE1X56-136-251 | | |
| | | | | -5 | 4 | KNURLED BOLT | 4140/4142 | | 4 | REV 1 | | |
| | | | | -7 | 4 | SPECIAL NUT | 4140/4142 | | 5 | MAT'L | | |
| | X | | | -9 | 1 | BOLT ASSEMBLY | | | 6 | HEAT TREAT FINISH | | |
| X | 1 | | | -11 | | BOLT WELDMENT | | | 7 | SPEC | | |
| 1 | | | | -13 | | ACME ROD | STEEL | M20 X 4mm ACME (MCMaster-CARR #97048A719) MODIFIED | 7 | DRAWN BY: DUERFELDT | | |
| 1 | | 1 | B/O | -15 | | ACME HEX NUT | STEEL | M20 X 4mm ACME (MCMaster-CARR #94353A200) | 2 & 7 | CHECKED: CLOUGH | | |
| | 1 | | B/O | -17 | | BEARING BALL | S.S. | Ø10mm (MCMaster-CARR #1598K32) | 6 | OPPS APPR: ANDERSON | | |
| ASSY -11 | ASSY -9 | ASSY -1 | | | | | | | | QA APPR: LINDSAY | | |
| | | | | | | | | | | APPROVED: GILBERT | | |
| | | | | | | | | | | SCALE 1:4 | | |
| | | | | | | | | | | DATE 8/5/2016 | | |
| | | | | | | | | | | SHEET 1 OF 8 | | |

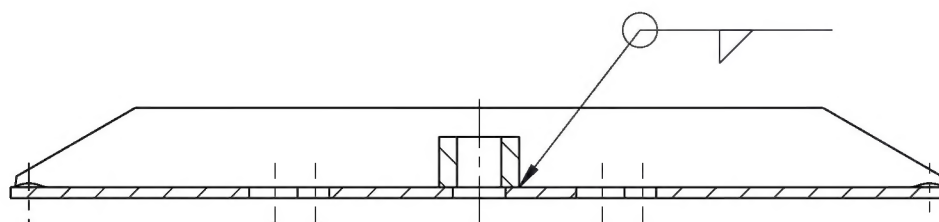
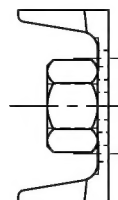
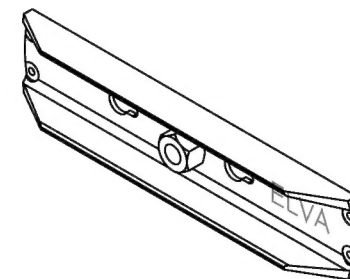
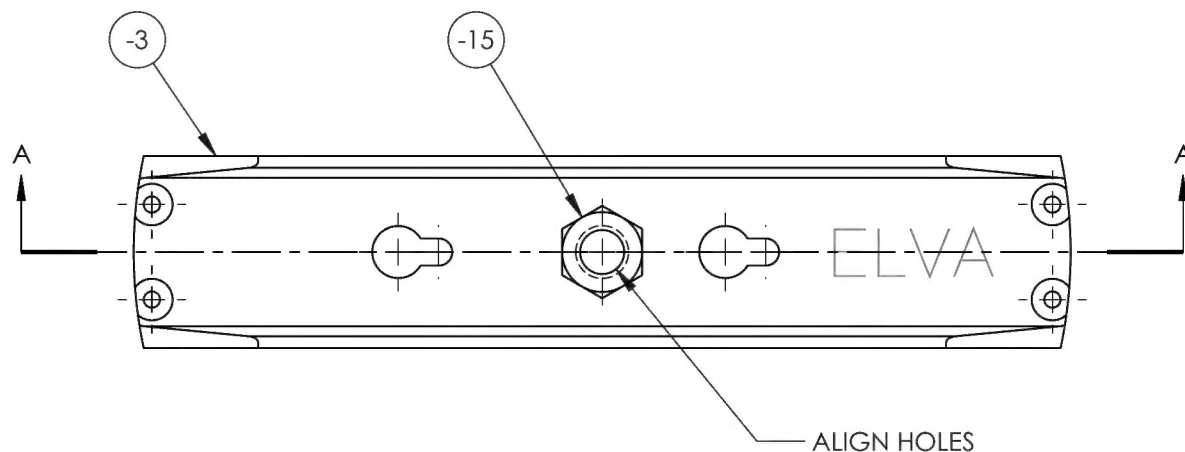
DART
AEROSPACE

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
.XXX ± .005 FRACTIONS ± 1/8
.XX ± .01 ANGLES ± .5°
.X ± .1 SURFACES = 125°
1. BREAK ALL SHARP EDGES
.015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY
AFTER PLATING
3. INTERPRET DIM AND TOL PER
ASME Y14.5M-2009

USED ON MODEL
H145

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

| REVISIONS | | | | | |
|-----------|-----|-------------|------|---------|----------|
| REV | ECR | DESCRIPTION | DATE | INITIAL | APPROVED |



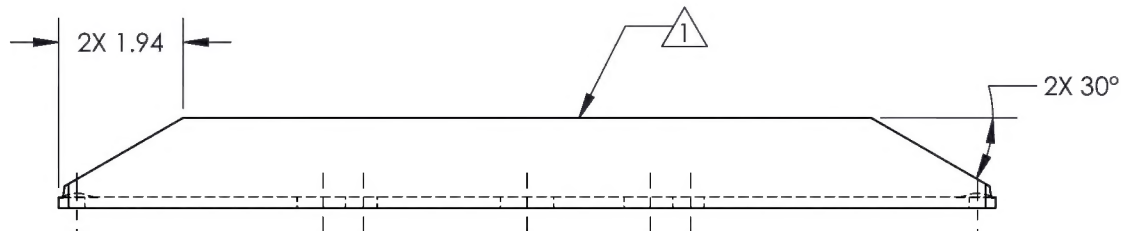
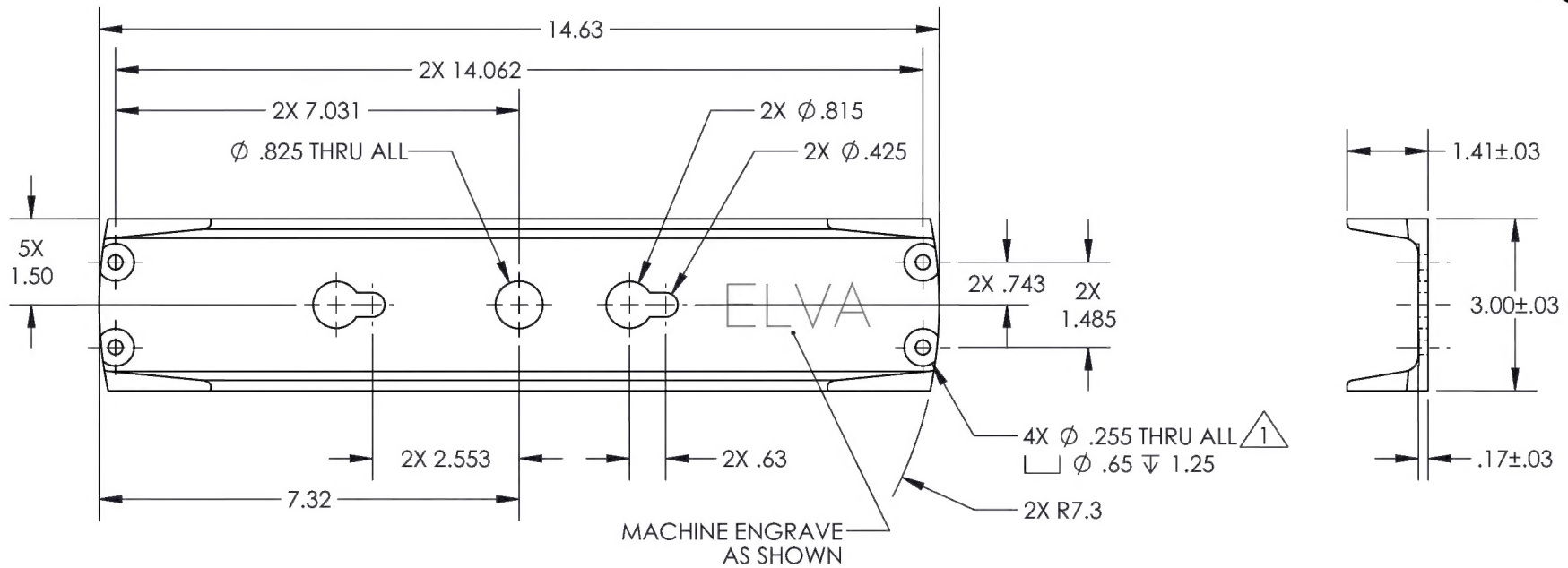
SECTION A-A

(-1)
FRAME WELDMENT

| | |
|--|---|
| DART AEROSPACE | |
| TITLE PULLER | |
| DWG NO. RBE1X56-136-251-1 | REV 1 |
| MAT'L HEAT TREAT FINISH ZINC PLATE SPEC ASTM B633 TYPE I SC 2 | UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125° |
| DRAWN BY: DUERFELDT | 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R |
| CHECKED: CLOUGH | 2. DIMENSIONAL LIMITS APPLY AFTER PLATING |
| OPPS APPR: ANDERSON | 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 |
| QA APPR: LINDSAY | USED ON MODEL |
| APPROVED: GILBERT | H145 |
| SCALE 1:3 | DATE 8/5/2016 |
| SHEET 2 OF 8 | |

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| REV | ECR | DESCRIPTION | DATE | INITIAL |
| | | | | APPROVED |



(3)
CHANNEL

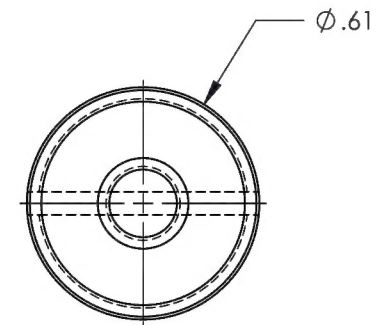
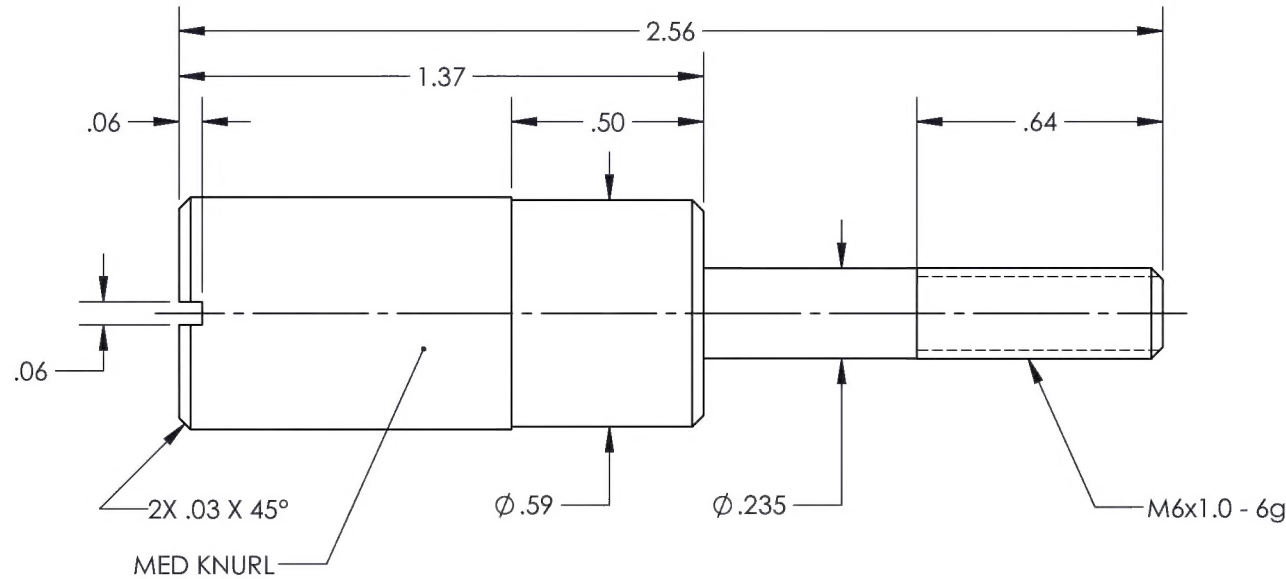
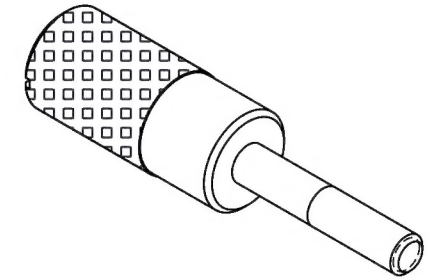
NOTE:

(1) HOLE DEPTH CALLED FROM THIS SURFACE.

| | |
|--|------------------------------|
| DART AEROSPACE | |
| TITLE PULLER | |
| DWG NO. RBE1X56-136-251-3 | REV 1 |
| MAT'L STEEL HEAT TREAT FINISH SEE -1 SPEC | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX \pm .005 FRACTIONS \pm 1/8 .XX \pm .01 ANGLES \pm 5° .X \pm .1 SURFACES = 125 ✓ | |
| 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 | |
| DRAWN BY: DUERFELDT | USED ON MODEL H145 |
| CHECKED: CLOUGH | |
| OPPS APPR: ANDERSON | |
| QA APPR: LINDSAY | |
| APPROVED: GILBERT | |
| SCALE 1:3 | DATE 8/5/2016 |
| SHEET 3 OF 8 | |

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| REV | ECR | DESCRIPTION | DATE | INITIAL |
| | | | | APPROVED |



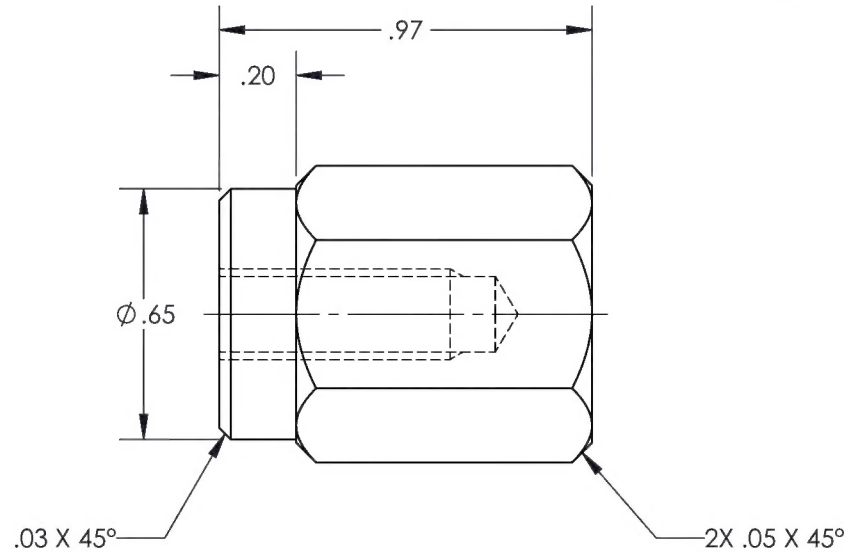
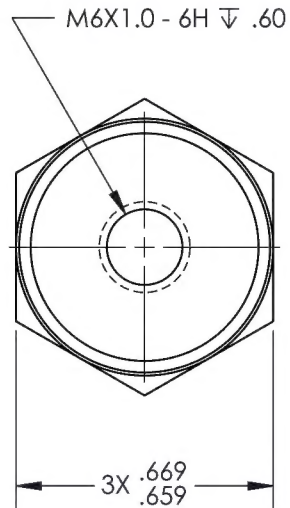
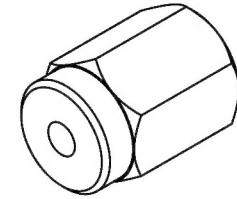
(-5)

KNURLED BOLT

| | |
|--|---|
| DART AEROSPACE | |
| TITLE PULLER | |
| DWG NO. RBE1X56-136-251-5 | REV 1 |
| MAT'L 4140/4142 HEAT RC 28-32 TREAT FINISH ZINC PLATE SPEC ASTM B633 TYPE I SC 2 | UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125° |
| DRAWN BY: DUERFELDT CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT | 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 |
| SCALE 2:1 | DATE 8/5/2016 |
| USED ON MODEL H145 | |
| SHEET 4 OF 8 | |

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| REV | ECR | DESCRIPTION | DATE | INITIAL |
| | | | | APPROVED |

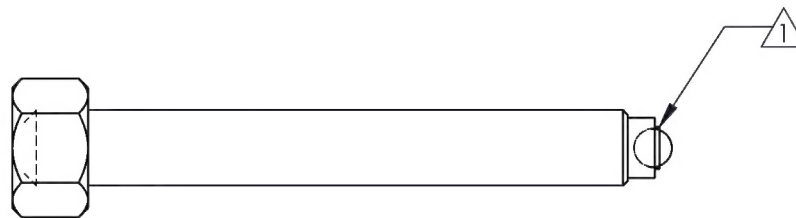
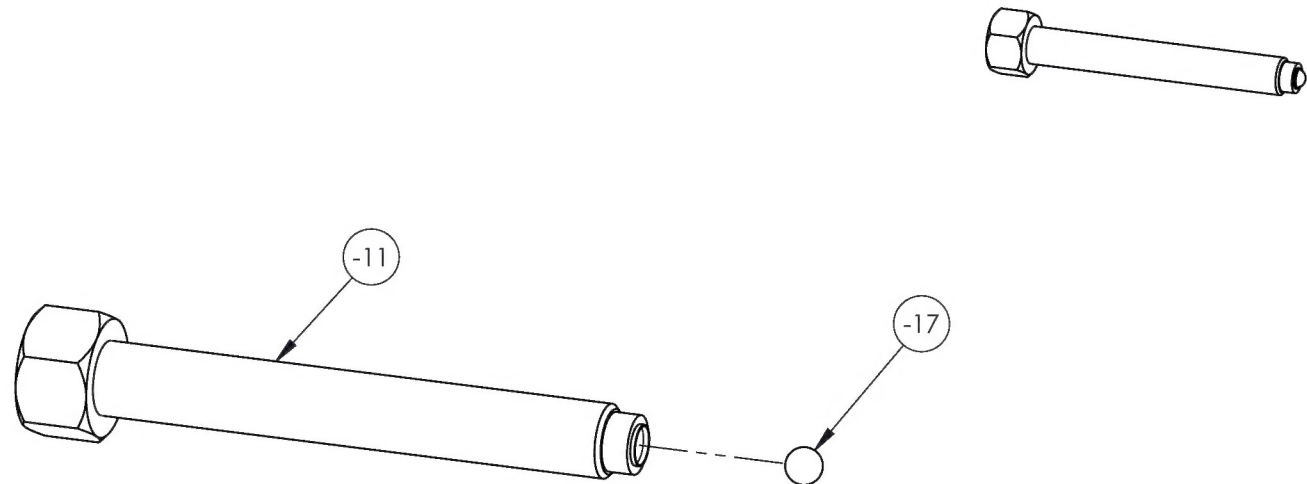


(-7)
SPECIAL NUT

| | |
|-------------------------------------|------------------------------|
| DART AEROSPACE | |
| TITLE PULLER | |
| DWG NO. RBE1X56-136-251-7 | REV 1 |
| MAT'L 4140/4142 | UNLESS OTHERWISE SPECIFIED |
| HEAT RC 28-32 | DIMENSIONS ARE IN INCHES |
| TREAT | .XXX ± .005 FRACTIONS ± 1/8 |
| FINISH ZINC PLATE | .XX ± .01 ANGLES ± 5° |
| SPEC ASTM B633 TYPE I SC 2 | .X ± .1 SURFACES = 125 |
| DRAWN BY: DUERFELDT | 1. BREAK ALL SHARP EDGES |
| CHECKED: CLOUGH | .015 x 45° OR .015R |
| OPPS APPR: ANDERSON | 2. DIMENSIONAL LIMITS APPLY |
| QA APPR: LINDSAY | AFTER PLATING |
| APPROVED: GILBERT | 3. INTERPRET DIM AND TOL PER |
| | ASME Y14.5M-2009 |
| | USED ON MODEL |
| | H145 |
| SCALE 2:1 | DATE 8/5/2016 |
| | SHEET 5 OF 8 |

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

| REVISIONS | | | | |
|-----------|-----|-------------|------|---------|
| REV | ECR | DESCRIPTION | DATE | INITIAL |



-9

BOLT ASSEMBLY

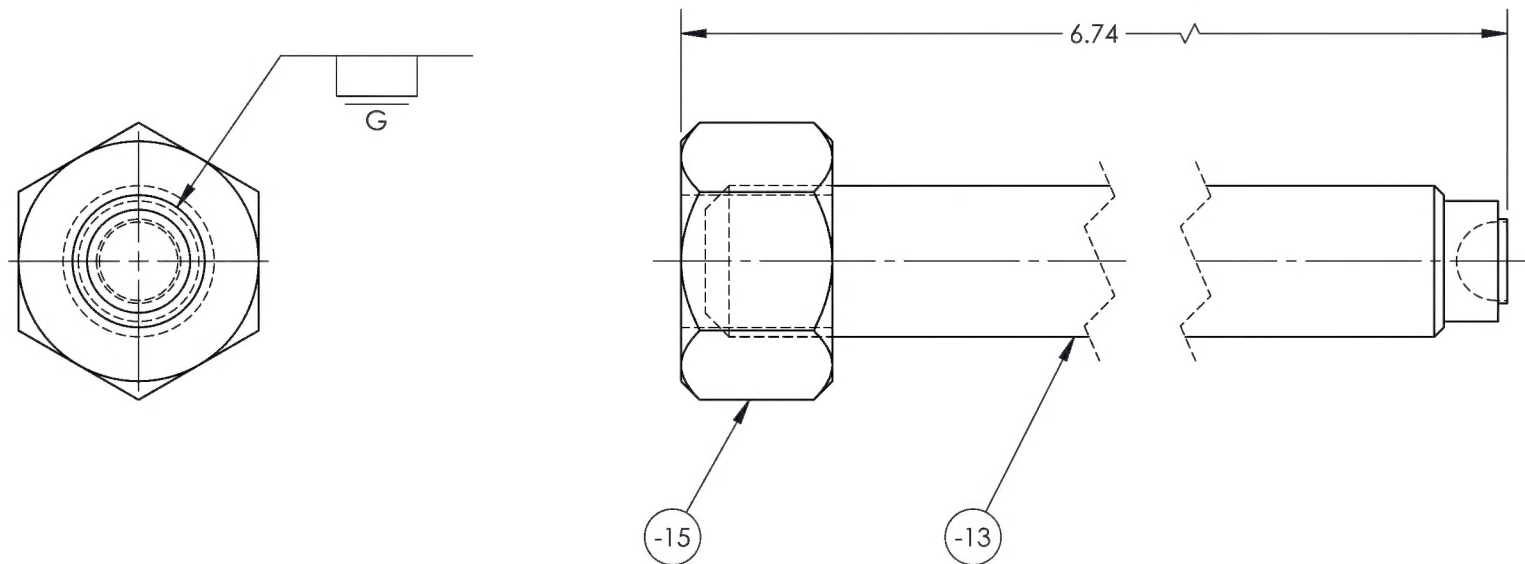
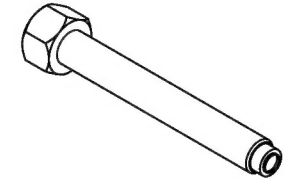
NOTE:

- 1 PEEN OVER LIP OF -11 BOLT WELDMENT AFTER INSTALLING -17 BEARING BALL. -17 BEARING BALL MUST ROTATE FREELY.

| | |
|--|---|
| DART AEROSPACE | |
| TITLE PULLER | |
| DWG NO. RBE1X56-136-251-9 | REV 1 |
| MAT'L REAT TREAT FINISH SPEC | UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125° |
| DRAWN BY: DUERFELDT | 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R |
| CHECKED: CLOUGH | 2. DIMENSIONAL LIMITS APPLY AFTER PLATING |
| OPPS APPR: ANDERSON | 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 |
| QA APPR: LINDSAY | USED ON MODEL |
| APPROVED: GILBERT | H145 |
| SCALE 1:2 | DATE 8/5/2016 |
| SHEET 6 OF 8 | |

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

| REVISIONS | | | | |
|-----------|-----|-------------|------|----------|
| REV | ECR | DESCRIPTION | DATE | INITIAL |
| | | | | APPROVED |



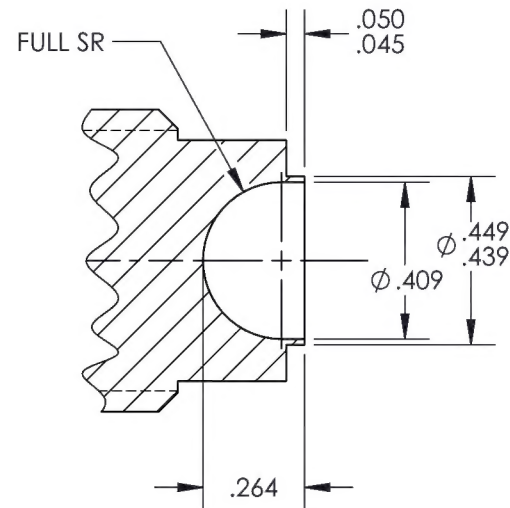
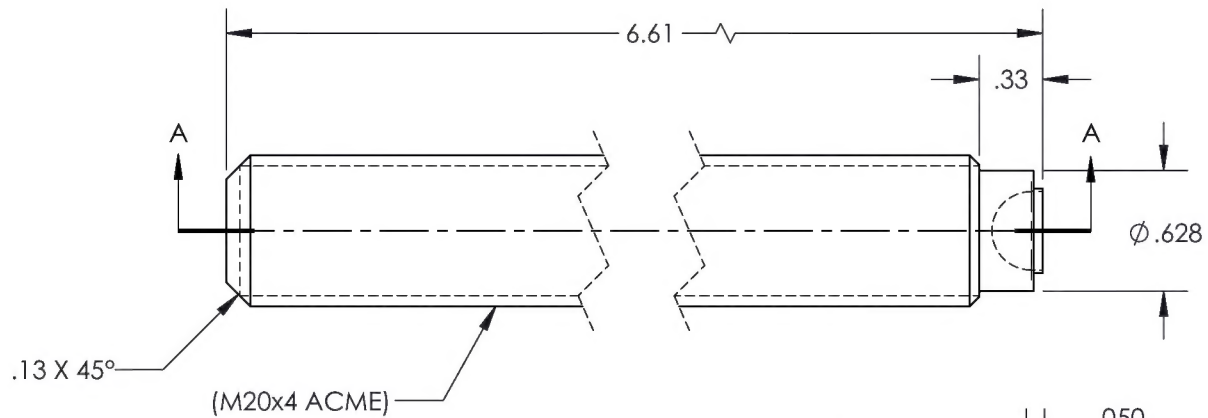
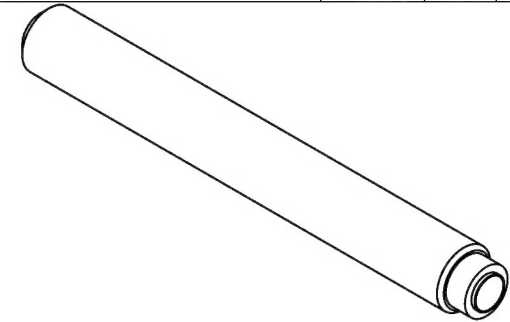
(-11)

BOLT WELDMENT

| | |
|----------------------------|---|
| DART AEROSPACE | |
| TITLE: PULLER | |
| DWG NO. RBE1X56-136-251-11 | REV 1 |
| MAT'L | UNLESS OTHERWISE SPECIFIED |
| HEAT TREAT | DIMENSIONS ARE IN INCHES |
| FINISH ZINC PLATE | .XXX ± .010 FRACTIONS ± 1/8 |
| SPEC ASTM B633 TYPE I SC 2 | .XX ± .03 ANGLES ± 1° |
| | .X ± .1 SURFACES = 125/✓ |
| DRAWN BY: DUERFELDT | 1. BREAK ALL SHARP EDGES |
| CHECKED: CLOUGH | .015 x 45° OR .015R |
| OPPS APPR: ANDERSON | 2. DIMENSIONAL LIMITS APPLY |
| QA APPR: LINDSAY | AFTER PLATING |
| APPROVED: GILBERT | 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 |
| SCALE 1:1 | USED ON MODEL |
| DATE 8/5/2016 | H145 |
| | SHEET 7 OF 8 |

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

| REVISIONS | | | | | | | |
|-----------|-----|-------------|--|--|------|---------|----------|
| REV | ECR | DESCRIPTION | | | DATE | INITIAL | APPROVED |



SECTION A-A
SCALE 2 : 1

(-13)
ACME ROD

| | |
|---|-------------------------|
| DART AEROSPACE | |
| TITLE PULLER | |
| DWG NO. RBE1X56-136-251-13 | REV 1 |
| MAT'L STEEL HEAT TREAT FINISH SEE -11 SPEC | |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± .5° .X ± .1 SURFACES = 125✓ | |
| 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 | |
| DRAWN BY: DUERFELDT | USED ON MODEL |
| CHECKED: CLOUGH | EC 145 |
| OPPS APPR: ANDERSON | |
| QA APPR: LINDSAY | |
| APPROVED: GILBERT | |
| SCALE 1:1 | DATE 8/5/2016 |
| SHEET 8 OF 8 | |